

CLEAN VERSION OF AMENDMENTS MADE TO SPECIFICATION

Please replace paragraph [0012] with the following:

A 1 Konowalchuk et al. reported a 1000-fold reduction in poliovirus infectivity after incubation with grape juice, at the natural pH of the wine (pH 3.3-4.4) or at pH 7.0 for 24 hours at 4° C, and found that commercial grape juice at neutral pH inactivated the herpes simplex virus. Red wines were reported to be more antiviral than white wines. The effect of wine at its natural pH against the herpes simplex virus was not examined.

Please replace paragraph [0014] with the following:

A 2 Von Rheinbaben, *et al.* (U.S. Patent No. 5,728,404) disclose compositions having virucidal activity against "naked" viruses (e.g., polio, adeno, vaccina, and SV40 tumor virus) comprising 50% to 90% by weight of at least one member selected from the group consisting of C₁-C₄ aliphatic monohydric alcohols and from 0.1% to 1.0% by weight of at least one metal salt, such as a zinc salt. Von Rheinbaben *et al.* found that compositions comprising between 40-80% by weight of ethanol, n-propanol, isopropanol, butanol, or mixtures thereof were ineffective against polio, adeno, vaccinia, and SV40 tumor viruses; however, these compositions could be made virucidal by adding metal salts to these alcoholic compositions.

Please replace paragraph [0026] with the following:

A 3 Accordingly, one aspect of this invention provides virucidally effective compositions consisting essentially of an aqueous solution of a short chain alcohol or diol adjusted to a pH at or below 4.6 with a suitable acid. Such compositions suitable for topical application and nasal deliverable form are also provided.

Please replace paragraph [0034] with the following:

A 4 The compositions of this invention consist essentially of a dilute aqueous solution of a C1 to C3 monohydroxy alcohol or a C3 to C4 diol which has been adjusted to a pH of 4.6 or below by the addition an inorganic or an organic acid. As used herein, "C1," "C2," "C3," and "C4" refer to alcohols having one, two, three, or four carbons, respectively. Such alcohols may be straight chain or branched alcohols. In one embodiment, the compositions are buffered, preferably with a suitable buffer that will maintain the pH of the composition. Such

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buffers are well known to persons skilled in the art.

Please replace paragraph [0038] with the following:

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In one embodiment, a composition of this invention consists essentially of 10% by volume of 95% ethanol in water, wherein the pH of the composition is adjusted to a pH of 4.6 or below by the addition of glycolic acid or HCl. For example, the pH may be adjusted to 4.6 by the addition of a 0.6% aqueous glycolic acid solution or a 0.1M HCl solution.

Please replace Table 3 on page 10 with the following:

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Table 3: Upper pH limit at which HSV-1 is inactivated by the alcohol

Alcohol	Concentration of alcohol	Upper limit of pH
methanol	0.2%	4.6
ethanol	0.2%	4.4
n-butanol	0.2%	4.6
1,2-butanediol	0.2%	4.2
2,3-butanediol	0.2%	4.6

Please replace paragraph [0048] with the following:

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The compositions were evaluated for the treatment of recurrent oral-facial herpes simplex infections as described in Example 2. A group of patients applied a solution consisting essentially of 10% by volume of 95% ethanol and 0.6% by weight glycolic acid in water, adjusted to pH 2.45, at the time of erythema, papule or vesicle stages. Development of blisters was arrested and rapid crusting of the vesicles occurred within 2 to 3 days of treatment, as compared to 10 or more days without treatment. When the same composition was applied within 24 hours of the prodromal stage of infection, that is, during awareness of burning, tingling, or itching but before blister development, the subjects noted that development of a papule did not occur. Thus, the compositions of the invention appear to prevent the formation of lesions, as well as being effective in reducing the healing time of the lesions.